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UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

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SAN FRANCISCO DIVISION

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TARI LABS, LLC,

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Plaintiff,

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-against-

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LIGHTNING LABS, INC.

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Defendant.

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:   CASE NO.: 3:22-cv-07789-WHO

:   **DECLARATION OF**
:   **ELIZABETH STARK IN**
:   **OPPOSITION TO PLAINTIFF'S**
:   **MOTION FOR A TEMPORARY**
:   **RESTRAINING ORDER**
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2   I, Elizabeth Stark, hereby declare:

3   1.   I am the co-founder and Chief Executive Officer at Lightning Labs, Inc.

4   ("Lightning Labs").

5   2.   I am a resident of the State of New York, and I am over the age of eighteen.

6   3.   I submit this declaration in opposition to Plaintiff's motion for a temporary

7   restraining order based on my personal knowledge and a review of company records.

8   **My Personal Background**

9   4.   I have been passionate about technology from a young age, ever since I

10   received my first computer. When I first used the internet, I was fascinated by a new frontier

11   where knowledge could be shared instantly across the world. I quickly became interested in

12   "open-source" technologies (where computer code is freely shared for use by the public) and

13   decentralized protocols (where no one user controls an overall system), and I pursued related

14   research as a student studying the intersection of law and technology.

15   5.   I received a J.D. from Harvard Law School, where I was a researcher at the

16   Harvard Berkman Klein Center for Internet & Society. After law school, I taught courses at

17   Yale University and Stanford University about technology and its impact on society, the

18   economy, and the law. I have also been a visiting fellow at Yale's Information Society

19   Project, an Adjunct Associate Professor at New York University, a fellow at Coin Center

20   (the leading digital currency policy organization), and an entrepreneur-in-residence at

21   Stanford StartX. In addition, I have advised numerous cryptocurrency companies and

22   initiatives as well as companies focused on decentralized technology and AI, and I regularly

23   engage with and mentor startup founders in the Bitcoin space. I regularly give talks around

24   the world on technology, startups, and Bitcoin.

25   6.   In April 2021 and April 2022, I was named by Barron's as one of the 100

26   most influential women in U.S. finance. Attached as Exhibit 1 are true and correct copies of

27   Barron's profiles of me. In March 2022, I was named by The Information as one of

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2   "crypto's rising stars." Attached as Exhibit 2 is a true and correct copy of The Information's

3   profile of me.

4   **Background on Bitcoin and Blockchain Technology**

5   7.   I first learned about Bitcoin – the original blockchain technology – while co-

6   teaching a course at Stanford in 2010, when a T.A. sent me an article about what I perceived

7   as "open-source money." My initial thought was that it sounded intriguing – *but will it*

8   *actually work?* Soon thereafter, I went down the rabbit hole, learning about the technology,

9   the protocol, and the incentive structure that goes along with Bitcoin.

10   8.   Put simply, blockchain technology allows multiple people to agree about what

11 is true without trusting any central authority. In a centralized system, you have to trust one

12 participant, like a bank, to maintain accurate information in its database. Blockchains

13 remove that one trusted participant and replace it with a public ledger that everyone can see

14 and verify. The modern blockchain industry began with the publication of a white paper

15 called *Bitcoin: A Peer-to-Peer Electronic Cash System* by the pseudonymous Satoshi

16 Nakamoto in 2008. This paper is available online at https://bitcoin.org/bitcoin.pdf.

17   9.   The Bitcoin network launched the following year, in 2009, and is the oldest

18 and foundational blockchain in the cryptocurrency space. Over 800 million transactions

19 have been processed on the Bitcoin blockchain using its native digital currency – bitcoin.

20 (For clarity, in this declaration the capital-B "Bitcoin" refers to the blockchain, while small-b

21 "bitcoin" refers to the cryptocurrency.) Bitcoin's technology is open-source: the code is

22 publicly available on Github, the leading platform for open-source software development

23 and maintaining version control for such software (at https://github.com/bitcoin/bitcoin), and

24 it has an active community of software developers working both directly on the Bitcoin code

25 as well as on technologies that use Bitcoin to function. As I describe below, my company,

26 Lightning Labs, is one of those developers.

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2   10.   Since Bitcoin's launch in 2009, the cryptocurrency ecosystem has grown

3 enormously. There are now hundreds, if not thousands, of unique blockchain protocols.

4 Different blockchain protocols (like Bitcoin, Ethereum, Monero, etc.) have different

5 characteristics and different communities of users. Different blockchains have different

6 strengths and features: for example, Bitcoin seeks to enable a global, decentralized currency,

7 while Ethereum offers smart contracts (*i.e.*, code written into a blockchain that automatically

8 executes the terms of an agreement) and other applications, and Monero provides its users

9 with a greater degree of privacy and anonymity. In my years of experience as a member of

10 the Bitcoin technical community, I have found that blockchain software developers

11 ordinarily work entirely or largely on a single blockchain. Bitcoin developers work on

12 Bitcoin; Ethereum developers work on Ethereum. Different blockchains have very different

13 code, functionality, and uses, so developers tend to focus their efforts on working with a

14 single blockchain.

15   11.   As I delved deeper into Bitcoin, I saw vast possibilities of what the

16 technology could do, and I ultimately realized it was the missing link for something I had

17 always envisioned: the "internet of money." Essentially, much like one can access vast

18 amounts of information on the internet, with Bitcoin one can provide anyone access to

19 financial services through a mobile phone. And much like one can easily send information

20 via email (which is quicker and cheaper than the post office or FedEx), with Bitcoin one can

21 easily send value, especially across borders. Both of these innovations have the potential to

22 greatly level the playing field and bring financial freedom to those left behind by – or who

23 do not have access to – the traditional financial system.

24   12.   I also have always been passionate about building technology, and I was

25 exposed to startups as a student intern. So, I decided to try to help Bitcoin realize its

26 potential to create the internet of money by starting Lightning Labs.

27 **Lightning Labs**

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The Founding of Lightning Labs & Development of the Lightning Network

3   13.   Lightning Labs was founded in 2016, with Olaoluwa ("Laolu") Osuntokun as

4   a co-founder, to build technology for software developers. Laolu has a brilliant technical

5   mind and is one of the leading Lightning Network experts in the world at just 29 years old.

6   Our founding team has a unique background in our industry, as Lightning Labs is one of the

7   only companies in the industry that is led by a woman and black founder, as far as I am

8   aware.

9   14.   Our ultimate goal with Lightning Labs is to bring about greater financial

10   access globally with the technology we are building. Lightning Labs builds software for

11   developers who use the Lightning Network, a technology for the Bitcoin blockchain that

12   enables instant, high-volume transactions with low fees. Why today is it so easy to send a

13   photo anywhere in the world with a click of a button, but if you want to send money across

14   the world, it is a cumbersome process that could cost large amounts of money and take days?

15   That is a problem that the Lightning Network can solve. The Lightning Network is not a

16   blockchain; it is built on top of the Bitcoin blockchain. The Lightning Network is an "open"

17   protocol, much like the World Wide Web is open and controlled by no company or

18   individual. Lightning Labs is not the owner or sole developer of the Lightning Network—

19   the network is an open-source body of code that is maintained and updated by an active

20   community of developers, many of whom have no affiliation with Lightning Labs.

21   15.   The Lightning Network encompasses tens of thousands of "nodes" (which are

22   like computer servers) that developers and technical community members operate to

23   facilitate transactions on the network. All of these nodes "talk" to each other with software.

24   There are a number of different versions of node software, and my company builds the

25   leading one, called "LND." We also have a series of other tools for developers to work with,

26   including application programming interfaces ("APIs").

27   ***Who Uses Lightning Labs' Technology?***

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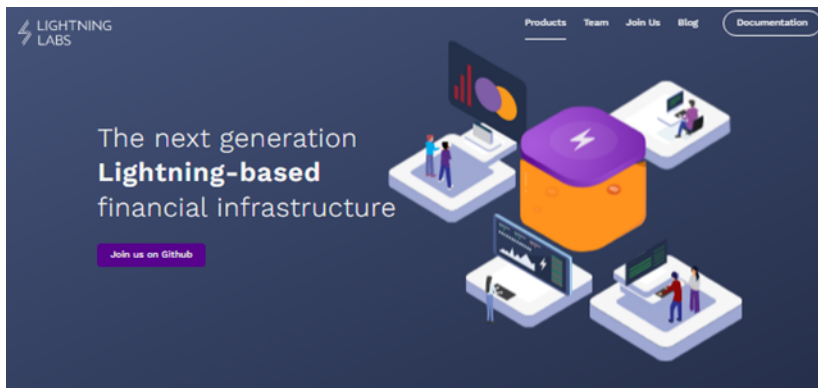
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2   16.   For several years now, Lightning Labs has focused exclusively on building

3 resources for developers. None of our projects – including the TARO project that I will

4 discuss further below – is intended to be used directly by ordinary consumers (meaning non-

5 technical users who do not work with computer code to build applications). Building

6 products for developers rather than consumers is very common in the cryptocurrency space,

7 and even the broader computer technology space. One good example of this is Oracle.

8 Anyone who has used a computer in the past decade almost certainly has used an application

9 or visited a website that was built with one of Oracle's products called "MySQL." MySQL

10 is a database application used by companies from Netflix to Walmart to Bank of America.

11 *See* MySQL, http://www.mysql.com. People who watch movies on Netflix or buy groceries

12 from Walmart or deposit money with Bank of America are doing things that are enabled by

13 Oracle's MySQL product – but those people will almost never encounter the MySQL brand

14 name when doing so, because MySQL is a developer product, not a consumer product.

15 Netflix's developers will work on the underlying code that enables Netflix to deliver

16 consumers streaming movies, and those developers will know how to use developer-focused

17 tools like MySQL (or developer computer programming languages like "CPython") to do so

18 – but ordinary consumers will just watch their movies without ever knowing the names of

19 the technologies Netflix developers use.

20   17.   Lightning Labs similarly focuses on building developer products, not

21 consumer products. As I explained in a November 5, 2021 interview with Bloomberg TV,

22 Lightning "build[s] developer architecture." That interview is available at

23 https://www.bloomberg.com/news/videos/2021-11-05/ride-the-lightning-in-conversation-

24 with-elizabeth-stark-video.

25   18.   Lightning Labs' software is not intended for use by ordinary consumers, even

26 those who buy and sell digital assets like non-fungible tokens ("NFTs") and cryptocurrencies

27 but are not software developers with an advanced understanding of blockchain infrastructure.

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2 Lightning Labs does not interact with end consumers and has not done so for years. (In the

3 early days of the company, we started to develop a digital wallet application, largely for

4 technical users and early adopter enthusiasts who were following the technology. The idea

5 was to create an open-source "reference" application so that other developers could use the

6 code to build on our technical infrastructure. Anyone could use the wallet, but it took some

7 degree of technical know-how, especially due to the complexities of the Lightning Network.

8 The project was never a major focus for us, consisting of at most two developers at time, and

9 it was only ever available for testing purposes. We abandoned development on that project

10 in 2019 in order to focus exclusively on creating developer technologies. Since that time, we

11 have not worked on any consumer-facing projects.)

12   19.   Lightning Labs' software is not sold in stores, distributed through the Apple

13 App Store, or usable by the general public through an ordinary website. Lightning Labs'

14 code is instead available through a public website hosted by Github, where the code can be

15 downloaded and built upon by sophisticated developers who understand how to use it.

16 Below is a screenshot of the Lightning Labs "Products" page

17 (https://lightning.engineering/products) – which starts with a Github link to our code base

18 and then describes "Our Technology Stack" for developers (our "users").

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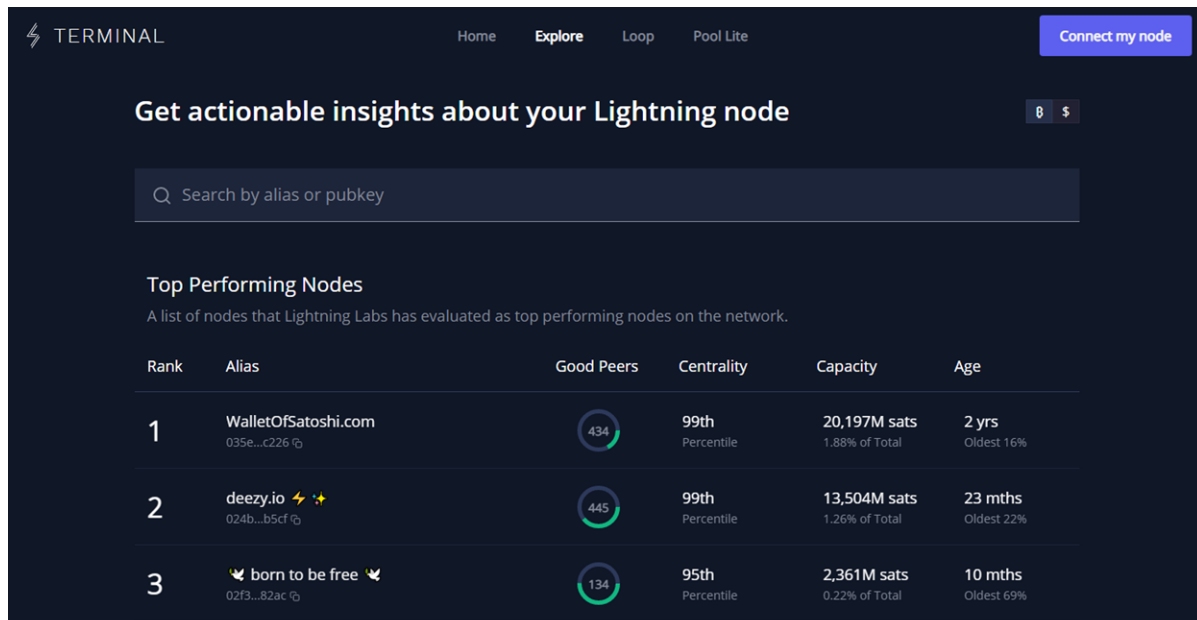
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20 Lightning also hosts a web interface for developers to connect their Lightning Network

21 nodes. Below is a screenshot of this interface, accessible at

22 https://terminal.lightning.enginering.

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20.   Lightning Labs' developer infrastructure products are akin to the MySQL or

CPython products I discussed above. Just as developers can use MySQL or CPython to

create consumer-facing products and applications (like Netflix or Instagram), blockchain

developers can use Lightning Labs' software to develop applications on the Bitcoin

blockchain. But just like ordinary consumers who use Netflix and Instagram don't see or

interact directly with the MySQL or CPython product names, ordinary consumers who might

send money over the Lightning Network wouldn't see or interact directly with the Lightning

Labs brand or our product brands. For example, hundreds of companies currently use

Lightning Labs' LND software today, but ordinary consumers do not see the LND mark or

branding when they use it. Our software serves as the invisible infrastructure that makes

certain Bitcoin transactions possible – and a goal with our technology is to eventually make

the "Bitcoin" name itself invisible to many people who use it and simply want to transact

online in other currencies (such as U.S. dollars). As I wrote on Twitter on February 12, 2021

in response to Nassim Nicholas Taleb: "Many users in the future will be using #bitcoin

without even knowing it. 🤯" Attached as Exhibit 3 is a true and correct copy of this tweet.

21.   We chose to focus on building software infrastructure for developers because

we believe that's where we can most effectively accomplish our mission. In essence, we

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2 build the best tools for developers, and those developers use our technical infrastructure to

3 build applications for the consumers who are the end users of those developers' applications.

4   22.   Based on my experience working with the Bitcoin community for nearly a

5 decade, developers who work on blockchain software are a particularly sophisticated group

6 and generally work in distinct communities focused on a specific blockchain.

7   23.   Working on software code is a complex and highly technical process, and

8 developers are keenly aware of exactly what software they're working on and using. While

9 an end user will usually not understand all of the tools that go into the app they are using –

10 the consumer just wants the app to work – software developers need to focus on all of the

11 technical details, otherwise the app *won't* work. An ordinary user of the Instagram app, for

12 example, is highly unlikely to know that it was built through, among other languages,

13 CPython, let alone know who developed CPython or how it is used by developers – but

14 Instagram's developers will know exactly what CPython is and how to use it. Likewise,

15 individuals making routine Bitcoin transfers are unlikely to know whether or when Lightning

16 Labs' technology underlies at least some of those transfers – they just know their transfer

17 went through.

18 ***Lightning Labs Today***

19   24.   Today, Lightning Labs has a team of 29 full-time employees and contractors

20 from around the world, including the United States, Brazil, South Africa, Germany, Canada,

21 Switzerland, and Hungary. We are a small team – mostly developers – building for other

22 developers. I feel privileged and grateful every day to work with some of the smartest

23 people in the industry who are deeply passionate about our mission to build technology to

24 bring financial access to the world.

25   25.   Although Lightning Labs is a relatively small organization, the company has

26 received significant attention for its projects and the innovative applications of those projects

27 to date, such as the LND software. We also have attracted investment from sophisticated

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investment firms and individual investors, and most recently announced a Series B

fundraising round in April 2022.

The TARO Protocol

What is TARO?

26.   As we built up the technology and protocol code for the Lightning Network,

many developers started to ask us for access to U.S. dollar "stablecoins" (which are digital

assets whose value is pegged to another asset, such as the U.S. dollar). Developers loved the

fast transaction speed and low cost of sending transactions over the Lightning Network, but

historically the Lightning Network was primarily used to send bitcoin. The price of bitcoin

has fluctuated significantly – in the past year alone, one bitcoin has been worth anywhere

from over $44,000 to under $17,000.

27.   The variable price of bitcoin can pose challenges for people looking for a

more stable store of value, which Lightning Labs is interested in addressing from a

technological perspective. One of our primary areas of focus for growth of the use of our

underlying technology is emerging markets, in places like Latin America, Africa, and

Southeast Asia, where a number of countries have experienced high inflation and economic

instability. Many of the people in these regions rely on relatively stable currencies like

dollars to fight against inflation or other economic instability in their countries, but they also

have difficulty accessing the traditional financial institutions that allow for dollar-based

transfers (and, as I mentioned above, those traditional payment rails can be exceptionally

slow and costly).

28.   Many of Lightning Labs' team members, who are interested in building

payments technology for these reasons, believe that stablecoins pegged to the U.S. dollar

would be a solution to this problem. Stablecoins could take advantage of the ease, speed,

and low cost of Lightning Network transactions on the Bitcoin blockchain, without exposing

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2   users to the price fluctuations of bitcoin. But historically, though there were attempts, the

3   Bitcoin blockchain did not support the easy creation of new digital assets, like stablecoins.

4   29.   That changed with a recent update to the Bitcoin protocol on which the

5   Lightning Network is built. That update was called "Taproot," and it significantly expanded

6   Bitcoin's capabilities. Laolu, in his brilliance, used the Taproot upgrade to come up with a

7   highly technical proposal for a way to create assets on the Bitcoin network and then transact

8   with those assets over the Lightning Network. The code that implements Laolu's proposal is

9   called TARO (which stands for "**T**aproot **A**sset **R**epresentation **O**verlay"). TARO will give

10   developers a new tool to bring stablecoins to Bitcoin in a more efficient way, particularly

11   because the protocol is designed to support the Lightning Network.

12   30.   Like Lightning Labs' other products, TARO is a software tool for developers

13   to use, not a blockchain or digital asset or NFT. Developers can use TARO to create new

14   digital assets (such as stablecoins) that will exist on the Bitcoin blockchain and be

15   transferrable via the Lightning Network. Those assets won't be called "TARO," however;

16   the developers will brand them however they want. For example, a developer could brand an

17   asset created through TARO as "beefbux" (a company joke related to Laolu's "roasbeef"

18   handle) or any other name – just like Netflix's streaming service uses MySQL behind the

19   scenes without ever telling users. If developers (or any other third parties) want to tell

20   consumers what blockchain they are using for assets created with TARO, it will be the

21   Bitcoin blockchain – not TARO.

22   31.   To understand TARO's place in enabling the transfer of value over the

23   internet, it's helpful to draw a comparison to the flow of information over the internet. One

24   of the common ways that information moves over the internet is email. What ordinary

25   consumers know as "email" are actually communications between servers known as

26   "message transfer agents" using a protocol called the "Simple Mail Transfer Protocol," or

27   "SMTP." The original design of SMTP was proposed in September 1980 as a common

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2 standard for the transfer of mail messages over the internet (then known as ARPANET). *See*

3 Mail Transfer Protocol, Network Working Group RFC 772 (September 1980), available at

4 https://datatracker.ietf.org/doc/html/rfc772. SMTP has been updated and modified

5 constantly since it was initially proposed in the 1980s – that's an ordinary part of open-

6 source protocol development. Every time an email is sent over the Internet, SMTP is

7 involved behind the scenes: it sets the common language that different mail servers use to

8 talk to each other. Ordinary consumers "use" SMTP every day without ever realizing it:

9 email just works. When ordinary consumers open up their Gmail, Yahoo, or Outlook email

10 accounts, they are technically using an SMTP mail client – but nobody calls it that. And

11 when ordinary consumers send an email from their Gmail account, they are transferring

12 messages between servers via SMTP – but nobody calls it that, either.

13   32.   TARO is like SMTP. It is a *protocol* that will govern how digital assets are

14 created and transferred on the Bitcoin blockchain, just like SMTP governs how email is

15 created and transferred among mail servers. Lightning Labs' goal is for the TARO protocol

16 to allow for digital assets to be sent over the Bitcoin blockchain and the Lightning Network

17 with the same ease that SMTP allows for email to be sent from a Gmail account to a Hotmail

18 account. While the sophisticated email developers who built Gmail are well aware of what

19 SMTP is, ordinary users are not – they just know that sending an email using Gmail works.

20 And while the sophisticated Bitcoin developers who work with TARO will understand

21 exactly what it is, ordinary consumers will not – they will just know that sending money

22 using Bitcoin works.

23   33.   Lightning Labs is not creating – and has no plans to create – a cryptocurrency

24 or other digital assets under the "TARO" brand. Rather, TARO is simply the name of the

25 software code that developers can use to create digital assets. As Lightning Labs explains in

26 the FAQ section of its website in response to the question "Where can I buy Taro tokens?":

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"***Taro is a protocol***. . . . The best way to invest in Taro is ***to build on top of it***." (Emphasis added.) A true and correct copy of this FAQ page is attached as Exhibit 4.

34.   Ultimately, TARO is just code, available to developers on Github. Below is a screenshot of the Lightning Labs developer documentation website for TARO (https://docs.lightning.engineering/the-lightning-network/taro) and a screenshot of the TARO product itself – the code for the protocol that lives on Github (https://github.com/lightninglabs/taro). Given that TARO is not a consumer-facing brand, Lightning Labs does not use a logo for the TARO protocol, nor does Lightning Labs intend to create a consumer-facing homepage (as opposed to a developer-facing site with technical documentation) for TARO. Rather, when Lightning Labs writes the word "TARO" in the documentation for the protocol, it uses a standard black font that it uses in its documentation for all of its projects (as shown below).

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The "Taro" Page in Lightning Labs' "Builders' Guide"

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https://docs.lightning.engineering/the-lightning-network/taro

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The TARO Protocol

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https://github.com/lightninglabs/taro

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2   *Who Will Use TARO?*

3   35.   TARO has only ever been intended for use by sophisticated blockchain

4   software developers, as a tool to allow such developers to build other products that can be

5   used by end consumers who will not know (or have any need to know) about the inner

6   workings of the software they use. Consumers may interact with the TARO protocol, but

7   they are highly unlikely to be aware of that – much like ordinary users of the internet are not

8   aware of the core protocols that make the internet possible (such as "TCP/IP" and "SMTP"),

9   and ordinary users of Netflix have no idea what a "MySQL" database is.

10   36.   Since Lightning Labs announced TARO in April 2022, I have consistently

11   and accurately stated that TARO is a tool for developers and that consumers would not even

12   know a transaction uses the TARO protocol. This is a concept I explained, for example, in

13   an April 5, 2022 article about TARO published on Medium: "[T]he vast majority of users in

14   the future may not even know they're using bitcoin, much like how they don't know they're

15   using TCP/IP today." A true and correct copy of this Medium post is attached as Exhibit 5.

16   37.   Tari Labs tried to analogize TARO to GORE-TEX fabric by arguing that the

17   TARO protocol will allow users to create a variety of assets much like "GORE-TEX®

18   material is incorporated into clothing made by many different designers" – but that is a

19   misleading and inaccurate analogy. TARO is a tool for developers to use in creating new

20   Bitcoin blockchain digital assets, not a component part of those products, any more than the

21   SMTP protocol is a component part of an email. Following Tari Labs' analogy to

22   manufacture of clothing, TARO could more accurately be compared to an industrial sewing

23   machine and design specifications, which allow a sophisticated clothing manufacturer to sew

24   whatever type of garment they want to make and brand it however they want. While

25   consumers may end up wearing clothes created by that industrial sewing machine, they are

26   unlikely to ever encounter the brand name of the sewing machine designer in commerce –

27   they will simply see the retail clothing brand. Similarly, while sophisticated software

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developers may use the TARO protocol to create assets, consumers will interact with those

assets based on the brands the software developers apply to them – not the TARO brand.

38.   That Lightning Labs is targeting its TARO protocol exclusively to

sophisticated developers is further evident in the highly technical way Lightning Labs has

presented the protocol. For example, in a 7.5-minute video providing a high-level

introduction to TARO posted on Lightning Labs' YouTube page, Lightning Development

Advocate Hannah Rosenberg explains that "[a]s [TARO] is powered by Taproot, you'll want

to have a decent base of knowledge about Taproot" and that "[l]inks on Taproot are below in

case you want to do a bit of a refresher before diving into this." Ms. Rosenberg further

explained that "[t]o understand all this, we're going to have to spend some time discussing

Merkle trees," which is a concept far too advanced for casual Bitcoin users or ordinary

consumers. Indeed, the majority of the introductory video – accessible at

https://www.youtube.com/watch?v=-yiTtO_p3Cw – is spent discussing the technical

elements of TARO protocol, including "Merkle sum, sparse Merkle tree" (or "MS-SMT"),

the concept of "Universes," and the routing of fungible assets through "TARO-enabled

channels" through sending and receiving "nodes." This overview of TARO is clearly neither

suitable for nor intended for lay audiences.

Why Name the Protocol "TARO"?

39.   Initially the project had an internal Lightning Labs code name, but we wanted

to create a developer-facing name for the protocol before releasing what is called a "BIP," a

highly technical "Bitcoin Improvement Proposal" that is suggested to the Bitcoin developer

community. In March 2022, I was having dinner with a developer friend who follows

Bitcoin technology and discussing the Taproot upgrade, and he mentioned "taro." I like taro

chips, and I knew that taro is a common ingredient used in Latin American, Southeast Asian,

and African cuisines, which were three key regions for the growth of this technology – so, I

responded "wait, that's a really cool name!" I immediately texted Laolu and Jacob

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2 Strumwasser (Lightning Labs' VP of Strategy) with the idea of calling the protocol

3 "TARO." Laolu later responded that taro was a major ingredient in Nigerian cuisine, and the

4 name appealed to him given his Nigerian heritage. And the fact that taro happened to be a

5 root vegetable was just perfect, given that the protocol was made possible by the Taproot

6 upgrade to Bitcoin. After internal discussions about the name and acronym below, and after

7 researching the TARO name, we were sold.

8   40.   As Lightning Labs explains in the "Builder's Guide" on its website, "Taro is a

9 new Taproot-powered protocol for issuing assets on the bitcoin blockchain. . . . Taro relies

10 on Taproot, bitcoin's most recent upgrade, for a new tree structure that allows developers to

11 embed arbitrary asset metadata within an existing output." Attached as Exhibit 6 is a true

12 and correct copy of that Builder's Guide. "TARO" is also an acronym standing for "Taproot

13 Asset Representation Overlay," as Lightning Labs has explained on multiple occasions since

14 April 2022. For example, in the introductory YouTube video cited above in Paragraph 28

15 Ms. Rosenberg states: "Taro, or Taproot Asset Representation Overlay, is a new Taproot-

16 powered protocol for issuing assets on the Bitcoin blockchain that can be transferred over the

17 Lightning Network."

18   *The April 2022 Announcement and September 2022 Initial Release of TARO*

19   41.   On April 5, 2022, we announced TARO through a blog post accompanied by

20 a series of highly technical documents outlining the design of the protocol. Attached as

21 Exhibit 7 is a true and correct copy of Lightning Labs' April 5, 2022 announcement of

22 TARO in a blog post entitled "Announcing Taro: A New Protocol for Multi-Asset Bitcoin

23 and Lightning 🥔 🍢 🌍." Our use of the "Roasted Sweet Potato" emoji (🥔) in the title of

24 this blog post is a humorous nod to the root-vegetable origins of the word "TARO," and we

25 have used that emoji in social media posts and newsletters regarding TARO.

26   42.   Following the April 5 announcement, the TARO protocol received press

27 coverage – including Bloomberg, CNBC, Axios, Forbes, Coindesk, CNBC, and Yahoo

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Finance – for the protocol's capability to "bitcoinize the dollar." Attached as Exhibit 8 are true and correct copies of selected media reports regarding TARO.

43.   We started writing the initial code for the TARO protocol in April 2022.

44.   While we developed the initial code for TARO in the months following the initial announcement, we continued to explain the protocol's technical details to developers, including in Lightning Labs newsletters published on April 13, June 8, and August 9, 2022. Attached as Exhibit 9 are true and correct copies of these newsletters.

45.   On September 28, 2022, we released the initial open-source code for the TARO protocol by publishing a public Github repository, which can be accessed at https://github.com/lightninglabs/taro. We published the TARO protocol code under an MIT License, which permits use of the code for any purpose on the condition that the user gives attribution to Lightning Labs and any external contributors. The code is highly specialized and technical, so it is only of practical use for Bitcoin developers with an advanced technical understanding of the Bitcoin blockchain and the Go programming language in which the TARO protocol code is written.

46.   After the initial open-source release in September 2022, all of the TARO code has been available on Github for developers to view and work on. Updates are being proposed, worked on, and submitted constantly. It is important to note that Lightning Labs is one of the developers working on the TARO protocol, but not the only one. Both Lightning Labs personnel and external contributors submit code contributions to the TARO protocol via Github, as is typical for open-source software development. Of the Github users who have contributed to the TARO protocol, approximately half are not affiliated with Lightning Labs but are rather active members of the Bitcoin developer community. This collaborative, participatory model of open-source software development is central to Lightning Labs' mission to create the most useful developer tools possible for the Bitcoin blockchain.

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2   47.   Third parties can also use the TARO protocol for projects that are unaffiliated

3   with Lightning Labs. For example, on or around October 26, 2022, NYDIG and Stone Ridge

4   Holdings Group issued a press release announcing the launch of a startup accelerator called

5   Wolf (under an entity called In Wolfs Clothing LLC), which will provide seed funding to

6   third-party developers to build projects for the Lightning Network (including with the TARO

7   protocol). Although NYDIG and the founder of Stone Ridge are two of the many investors

8   in Lightning Labs, Lightning Labs is not affiliated with Wolf. Lightning Labs mentioned the

9   Wolf project in its January 26, 2023 newsletter (not a "press release," as Tari Labs

10   misleadingly described it) entitled "Signal Over Noise: How Emerging Markets Are

11   Powering Lightning Growth 🎧 ✍ ⚡," in a list of dozens of other third-party projects using

12   or building on Lightning Network software. Attached as Exhibit 10 is a true and correct

13   copy of this January 26 newsletter.

14   *Current Status of TARO Development*

15   48.   The TARO protocol is still in the early stages of development and has not yet

16   been released for Bitcoin's live blockchain (called "mainnet"). Building protocols takes

17   enormous time and is a deeply technical endeavor. The development process involves

18   complex areas of computer science, like applied cryptography, distributed systems, and

19   technical architecture. We build technologies that no one has ever built before, which is both

20   exciting and can lead to a lot of unknowns. For example, whenever I ask Laolu when certain

21   protocol code will be completed, he typically responds with a date that is overly optimistic,

22   and when the code is inevitably not complete by that date, he says "well, no one has ever

23   built this before."

24   49.   In open-source software development (as opposed to closed-source or

25   proprietary software, where the code is kept secret by a developer), it is common to

26   continuously update software (called "commits" of new code to the main code), which are

27   periodically "released" as particular "versions" of the software. These "versions" are merely

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2 symbolic milestones of code that is largely already public. Because open-source software is

3 being developed entirely out in the open and all of the code – including proposed code – is

4 publicly visible, "versions" are important to provide a point of reference for everyone

5 working on the project, so that everyone agrees on and can easily reference the contents of

6 the code at a particular point in time.

7   50.   For early-stage software that is not yet in final form – such as TARO today –

8 it is common to begin the version number with "0." So, the very first pre-release version of

9 software might be labeled "version 0.1" and then subsequent updates to the pre-release

10 software will be versions 0.2, 0.3, and so on.

11   51.   At present, TARO is on version 0.1.1 alpha, which was released by Laolu on

12 November 14, 2022. In software development, there are commonly used phrases to describe

13 different development cycles. Most consumers are aware of "beta" testing. Beta is one of

14 the later testing phases before software takes its final form. Alpha releases are the stage in

15 software development before a beta release. Alpha software is in the initial phase of testing

16 and development, as features are still being refined and developed. Accordingly, TARO

17 version 0.1.1 alpha exists – as it has since the first code for the protocol was written in April

18 2022 – only as part of the Bitcoin "testnet" for software that is still in development.

19 Lightning Labs has not implemented TARO on the Bitcoin "mainnet." Getting code in a

20 state ready for mainnet takes time, and we do not know when it will launch – and even once

21 TARO is released on mainnet, it would still primarily be for testing purposes, so it would not

22 be fair to refer to such release as a "launch."

23   52.   The Bitcoin "mainnet" refers to the fully operational Bitcoin blockchain

24 through which cryptocurrency and other assets can be minted and transmitted – for example,

25 a purchase of bitcoin cryptocurrency from the currency exchange Coinbase or a transfer of

26 bitcoin to purchase goods or services in the physical world – and whose transactions are

27 validated and recorded on the mainnet distributed ledger.   A "testnet," in contrast, is a

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2   simulation or a working prototype of the mainnet (or code intended to later be "merged" to

3   the mainnet). A testnet is used by developers to test functionality, experiment, and

4   troubleshoot problems before launch. A blockchain is not considered to be "launched" until

5   it is released as a mainnet, and a blockchain protocol is not considered "launched" until it is

6   merged into a mainnet blockchain (e.g., the Bitcoin mainnet).

7   53.   Because TARO is still in a "testnet" form, the protocol has not yet "launched"

8   in any significant sense. To continue the industrial sewing machine analogy introduced

9   above, the current version of TARO 0.1.1 alpha is like an early prototype of the machine that

10   has some features that can be tested but is not ready for regular use and cannot create a

11   sweater or other garment that could be sold to retailers. And the prototype design will

12   change over time as problems are discovered and features refined, much like software is

13   constantly being updated with new code.

14   54.   Once the updates to the protocol that Lightning Labs and external contributors

15   have continually implemented for the past five months meet a series of designated

16   milestones, the update will be tagged as a new "release": version 0.2 alpha. In open-source

17   software development, a "release" means something very different than it does with

18   consumer-facing products. As explained above, in open-source software development, the

19   version number is designed to create a reference point – so that developers can identify the

20   code that exists at a particular point in time. But the underlying code and functionality often

21   already has been released or deployed into the code base – especially with open-source code,

22   which is designed to have changes viewable by everyone. That is very different from the

23   way consumer-facing products are "released" – where suddenly an app exists that didn't

24   exist before.

25   55.   The roadmap for upcoming additions or changes to the TARO code base is

26   published on the TARO Github page at

27   https://github.com/orgs/lightninglabs/projects/3/views/1. That roadmap (a true and correct

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2 copy of which, as of February 24, 2023, is displayed below and attached as Exhibit 11 shows

3 the features and updates that are currently in development for version 0.2 and demonstrates

4 that work remains to be completed before that version will be released. Before we stopped

5 development work in light of the Court's February 22 order requiring that the "status quo" be

6 maintained pending the hearing on March 8 (the "Order"), Lightning Labs hoped to release

7 version 0.2 alpha of TARO for the Bitcoin testnet within the next two months. Version 0.2

8 alpha will be a prototype with additional capabilities and features that were not present in

9 version 0.1.1 alpha – but it will still be a prototype.

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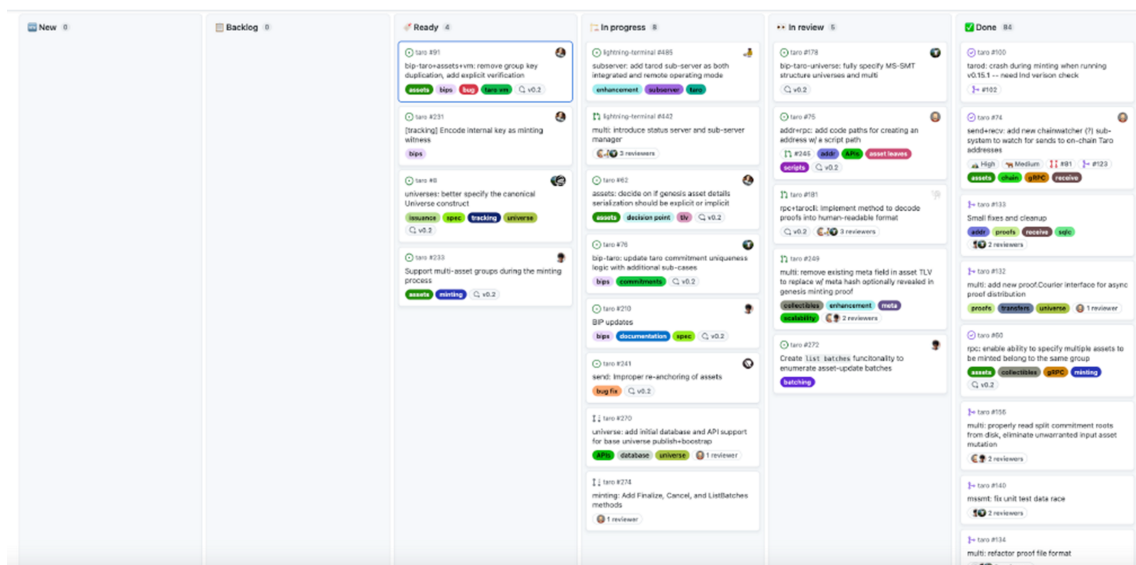
20   56.   As shown in the image above, several highly technical features of the TARO

21 protocol code are tagged for inclusion in "v0.2" and still need to be completed. Much of the

22 code for some of these features has already been written and is available for developers to

23 download, but not yet packaged into a release of the TARO code. Once the "v0.2"

24 milestones have been reached and we release the code with a new tag as "version 0.2 alpha,"

25 Lightning Labs and external contributors will continue to update the TARO code and issue

26 subsequent new version releases – just as we have over the past five months.

27   57.   Our development process for TARO has remained steady since April 2022,

28 more than ten months ago. In the nearly five months since our September 28, 2022 release,

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we have not changed our course or accelerated our development. In fact, development of the protocol *cannot* be "accelerated" in any significant sense because there are so many unknowns that arise in the course of software development. The only fundamental change we made to our development process for TARO since September 28, 2022 was to cease publishing public updates by the Order, which has impacted development as Lightning Labs has had to move all development efforts onto a private copy of the TARO repository, which had previously existed on the public Github page.

58.   In accordance with standard practice for open-source software development, Lightning Labs solicits direct feedback from a specific community of sophisticated Bitcoin blockchain software developers to improve the software. As part of these efforts, Lightning Labs has since 2019 facilitated quarterly roundtables with developers working on the Lightning Network. As part of Lightning Labs' development of the TARO protocol in particular, following the open-source release of TARO on September 28, 2022, Lightning Labs has coordinated two Taro Developer Community Calls, on December 13, 2022 and January 26, 2023, focusing on highly technical elements of the TARO protocol. Such calls are a standard part of open-source software development and do not indicate that the TARO protocol will imminently launch.

59.   Additionally, following the open-source release of TARO, Lightning Labs has continued to write about the protocol to a sophisticated audience in our newsletter, including on October 6, 2022. Attached as Exhibit 12 is a true and correct copy of Lightning Labs' October 6, 2022 newsletter regarding TARO entitled "To Bitcoin and Beyond: How Taro Expands the Lightning Universe ⊚ ⚡."

60.   TARO has also continued to receive consistent media coverage, with no marked increase in that coverage. Attached as Exhibit 13 are selected media reports regarding TARO published since September 28, 2022.

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61.   The bar graph shown below, produced automatically through Github's "Insights" function, shows the number of "commits" (*i.e.*, the number of updates to the TARO code) in each bi-weekly period for the year ending February 19, 2023. This graph shows that there have been hundreds of code updates to TARO since April 2022, a majority of which were implemented *before* the code was made public and open-source on September 28, 2022 (and, as discussed further below, before Tari Labs sent its first demand letter in September 2022 or filed its complaint in December 2022).
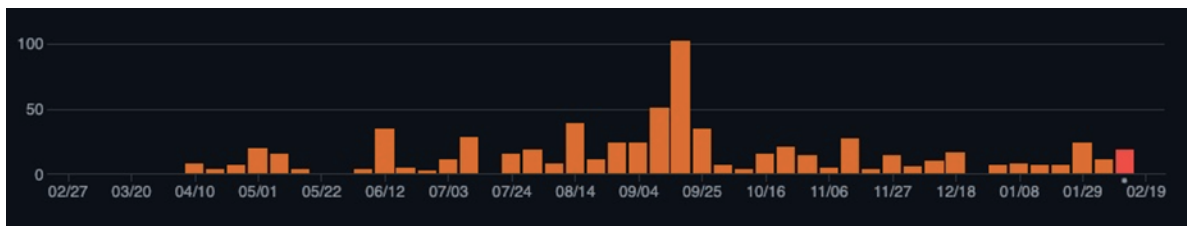
62.   The graph also shows that, since September 2022, updates to the TARO code have been continuously and steadily implemented, with no marked increase – if anything, there has been a slight *decrease* in the number of code updates during that time period. A true and correct copy of the Commits view of the Insights tab on the TARO Github webpage is attached as Exhibit 14. These data, in combination with a basic understanding of software development, make clear that Tari Labs is simply wrong to say that we have accelerated our development of TARO or have initiated any fundamental change in our development process. Lightning Labs has done nothing to hide the steps it has taken (and plans to take) to develop the TARO protocol. Because Lightning Labs codes out in the open, all of this information is publicly available on Github – including to Tari Labs.

Tari Labs

My Awareness of Tari Labs

63.   I first learned about Tari Labs in 2017, as I was friendly professionally with one of its co-founders, Riccardo Spagni, and met the other co-founder, Naveen Jain, through Mr. Spagni. My interactions with Mr. Spagni and Mr. Jain had always been friendly. By

2021, I understood that the people who had earlier been involved with Tari Labs had pivoted to focus their efforts on a project called "Yat," which markets emoji-based usernames to ordinary consumers, and which (to my knowledge) never used "Tari" in its branding. A screenshot from the Yat website (https://start.y.at) that was taken on February 24, 2023, is attached as Exhibit 15 and shown below:
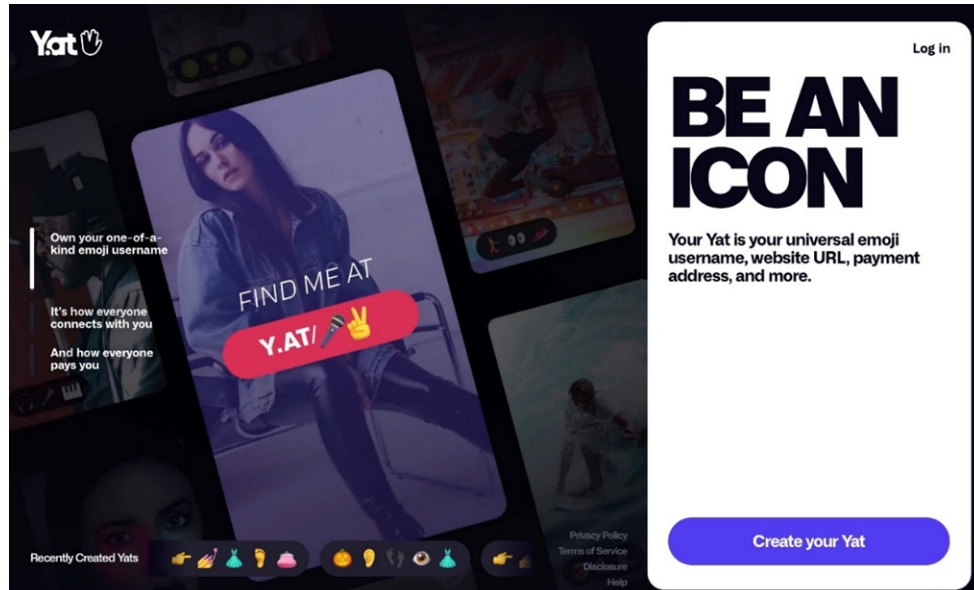
64.   In selecting the TARO name for our protocol that will allow developers to issue new digital assets on the Bitcoin blockchain and Lightning Network, TARI never crossed my mind. We had no intention to reference Tari Labs or any projects of Tari Labs. Even if Tari Labs had crossed my mind, it would have never occurred to me that any person could associate Tari Labs with TARO, much less that there could be any genuine confusion between the TARI and TARO marks among the sophisticated developers who will use TARO.

65.   The Bitcoin community has strong negative views on so-called "altcoins" (sometimes referred to with a more colorful term), which are crypto tokens with no value or purpose that were developed after the widespread adoption of Bitcoin beginning in 2017. I understand from reviewing the Tari website (www.tari.com) after this litigation was filed

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2   that there is a "fake Tari" coin with "no monetary value" called "testnet Tari (tXTR)" –

3   exactly the kind of pointless, valueless altcoin that developers in the Bitcoin community

4   would **never** want to be associated with. I thus would have viewed – and still view to this

5   day – any association with Tari Labs as a serious negative for our brand and our protocol.

6   ***April 2022 Contact with Tari Labs***

7   66.   In late April 2022, shortly after the initial announcement of TARO, I attended

8   the Crypto Bahamas conference. At the conference, I happened to run into Tari Labs' co-

9   founder Naveen Jain. As we quickly chatted, I mentioned the recent TARO announcement,

10   and TARI briefly came up. I hadn't thought about Tari Labs in a long time, and I thought

11   Mr. Jain was instead working on YAT.

12   67.   Given my understanding, I was surprised when, shortly after my conversation

13   with Mr. Jain (I believe later the same day), he sent me private messages on Twitter

14   regarding the TARO name, a true and correct excerpt of which is shown below and attached

15   as Exhibit 16.

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> Naveen 🏔 (🖐, 🖐)
> @NaveenSpark
>
> hi! How are you? Are you going to be in NYC first week of Nov by chance?
> 10/08/21, 7:18 PM
>
> hey!!
>
> are you still here in bahamas? Would love to catch up!!!
> 04/26/22, 2:35 PM
>
> also, we need to discuss the TARO name. full disclosure we have an issued trademark on TARI for blockchain networks. Love what you are doing of course but the name will prob cause some confusion... :)
> 04/26/22, 2:37 PM
>
> hi, i don't think it's similar, it's a root vegetable :)
>
> and it's not consumer-facing anyway
>
> I'm here yes and speaking tomorrow
> 04/26/22, 7:51 PM ✓
>
> I see! Can we catch up anytime today or tom?
> 04/27/22, 12:12 PM

15   68.   I am aware that, after we submitted the messages above to the Court, Tari

16 Labs baselessly and inaccurately accused me of "lying" to Mr. Jain. The exact opposite is

17 true: the actual content of my message said TARO will not be *consumer-facing*, which is as

18 true now as it was then. Tari Labs ignored my actual words to argue that I was somehow

19 hiding the fact that TARO would be "public facing." It is common terminology in the

20 software industry to distinguish between "developer" products from "consumer" products.

21 Lightning Labs exclusively builds open-source *developer* products, not *consumer* products.

22 Insofar as I believed Mr. Jain to have basic familiarity with ordinary terms used by those in

23 the software industry, I expected him to understand perfectly well that "it's not consumer-

24 facing" meant that TARO would be used by developers, not ordinary consumers. And, in

25 fact, I had no reason then – and have no reason now – to believe that ordinary consumers

26 will ever encounter the TARO name, because it is being used on software developed to be

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2   used by sophisticated developers who want to issue new digital assets on the Bitcoin

3   blockchain.

4   69.   As my response to Mr. Jain made clear, I believe that there is no way that

5   sophisticated software developers who will use the TARO protocol could possibly confuse

6   the TARO brand with Tari Labs' yet-to-be-released consumer-facing services on the Monero

7   blockchain. Blockchain developers are a completely separate community from ordinary

8   consumers of blockchain-based assets or services, and they take great care to understand the

9   projects they work on. And Bitcoin blockchain developers are a completely separate

10   community from Monero blockchain developers. I thus had no reason to believe – then or

11   now – that any developer would not understand the difference between the TARO protocol

12   for the Bitcoin blockchain and whatever Tari Labs might release in the future on the Monero

13   blockchain.

14   70.   Had I believed any confusion with the Tari Labs or the "Tari" name was

15   possible, I would never have selected the TARO name, because I believe the association any

16   Bitcoin developer would have with the Tari Labs name (if they knew about it) would be a

17   negative one.

18   ***The TARO Protocol Is Nothing Like Tari Labs' Proposed Software or Token***

19   71.   Lightning Labs and Tari Labs build different products on different

20   blockchains for different communities. Unlike Lightning Labs, Tari Labs does not develop

21   on the Bitcoin blockchain. Rather, as Tari Labs claims on the "What Is Tari?" section of its

22   website (https://tarilabs.com/faq/) – a true and correct copy of which is attached as Exhibit

23   17 – it is building a "an open source, digital assets focused blockchain protocol that is being

24   architected as a merge-minded sidechain of Monero," a separate blockchain from Bitcoin.

25   72.   Lightning Labs does not intend – and never has intended – that the TARO

26   protocol will be a cryptocurrency, digital asset, token, or NFT. While TARO will be the

27   protocol developers use to create and send those assets – like SMTP is the protocol

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developers use for software that can create and send emails – the resulting assets will be

issued on the Bitcoin blockchain and will be given entirely separate brand names.

73.   Lightning Labs does not intend – and never has intended – that that the

"TARO" mark will be used for a blockchain.

74.   Lightning Labs does not intend – and never has intended – that the TARO

protocol will be a mobile wallet.

75.   Lightning Labs has never intended that the TARO protocol would be used or

useable on Monero. Because the TARO protocol is built on Bitcoin, it cannot be used on the

Monero blockchain on which Tari Labs is developing and is not designed to interact with the

software Tari Labs is developing in any way.

The Intended Users of the TARO Protocol and Tari Labs' Proposed Software or Token Are Fundamentally Different

76.   The TARO protocol and the TARI protocol will also be used by

fundamentally different consumers. As explained above, Lightning Labs does not target the

TARO protocol to ordinary consumers of blockchain products, let alone the general public.

As with Lightning Labs' developer-facing projects in general, consumers are not likely to

see the TARO name at all. In contrast, I understand from Tari Labs' website – a true and

correct copy of which is attached as Exhibit 17 – that its protocol is intended for a non-

developer audience of consumers of "digital assets – things like tickets, loyalty points, in-

game items, and crypto-native assets like CryptoKitties." In other words, whereas Lightning

Labs exclusively creates software for sophisticated developer architecture with the goal of

facilitating financial freedom across the world, Tari Labs apparently intends the TARI mark

to be used for ordinary consumers who desire to collect assets like "CryptoKitties," an

excerpt from whose website (https://www.cryptokitties.co/) is shown below.

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What is CryptoKitties?

CryptoKitties is a game centered around breedable, collectible, and oh-so-adorable creatures we call CryptoKitties! Each cat is one-of-a-kind and 100% owned by you; it cannot be replicated, taken away, or destroyed.

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77.   I understand that Tari Labs has cited several quotes by employees of Lightning Labs in an attempt to allege that Lightning Labs will target its TARO protocol toward ordinary consumers, but Tari Labs has misrepresented every single one of these quotes and taken them all out of context.

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78.   For example, Tari Labs cites the following statement, which was published in an AAX interview with Leo Weese, a Technical Content Lead at Lightning Labs: "Our ideal Taro user is somebody who doesn't want to understand the protocol or bitcoin" and such a user is "just somebody who wants to transact cheaply and globally without holding bitcoin themselves." It is clear from the context of this quote that Mr. Weese was expressing that the ideal end-user of *digital assets created through TARO* (which will be branded however the developer creating the assets chooses) are consumers who need not know anything about blockchain development, not that such consumers will be using the TARO protocol itself.

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79.   The TARO name will not be visible to such ordinary consumers, it will be invisible in the same way that protocols underlying the internet are not visible to ordinary internet users. People every day send and receive emails without knowing that those emails are created, sent, and received using protocols like Simple Mail Transfer Protocol (SMTP). This concept is explained by Ms. Rosenberg in the introductory YouTube video cited above in Paragraph 38: "What [TARO] enables is for Taro assets to be embedded in Bitcoin transactions that are indistinguishable from regular Taproot transactions." In other words,

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recipients of assets minted using TARO will be indistinguishable from recipients of assets created through some other Bitcoin Taproot protocol.

80.   Tari Labs also quotes me as saying that "[i]t's one of those things where people don't really know how the credit card system works – and it just works." Rather than suggesting that TARO will be targeted toward ordinary consumers (as credit cards are), the statement suggests precisely the opposite. Ordinary users who swipe their credit card at the grocery store do not understand how the credit card system works – in the same way, ordinary users of the assets created using the TARO protocol will not understand how the TARO protocol works, or even that the protocol exists at all. The TARO protocol will work in the background for Bitcoin and/or Lightning Network transactions, and the transacting parties will not need to be aware of the process or the names of the software protocols used by developers along the way.

Ordinary Consumers Will Not Encounter TARO, and TARO Will Not Appear in the Same Contexts As Tari Labs' Proposed Software or Token

81.   As explained above, TARO is unlikely to be seen by ordinary consumers in any context, let alone any context in which they could see TARO at the same time as TARI. Nor will TARO likely be seen by developers in the same channels as they might see TARI.

82.   Although Lightning cannot control how third parties use or further develop the functionality of the TARO protocol, as I discussed earlier, Lightning Labs created TARO as a way of enabling developers to create stablecoins on the Bitcoin blockchain. Lightning Labs has no intention to create NFT tools for the TARO protocol. Accordingly, no confusion is likely among consumers seeking to create NFTs or browse NFTs to purchase, contrary to Tari Labs' assertion. Lightning Labs has no intention or expectation that the TARO name will be used on OpenSea (an NFT marketplace), given that TARO is not a consumer-facing brand.

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2   83.   Even if a third party were to develop TARO in such a way that it could mint

3   NFTs, I would not expect "TARO" to appear on OpenSea, since consumers would not

4   understand what "TARO" referred to. OpenSea currently supports only two blockchain

5   protocols: Ethereum and Polygon. Insofar as OpenSea allows users to create new NFT

6   assets, it does so by asking them to choose the *blockchain* on which they want to do so (*i.e.*,

7   Ethereum or Polygon), as shown in the below image from OpenSea's website

8   (https://opensea.io/learn/how-to-create-an-nft):

9
Finally, we'll ask you to list the supply, which is the number of items that will be created, and the
blockchain you'll be creating the NFT on. This defaults to Ethereum, but you can also choose to
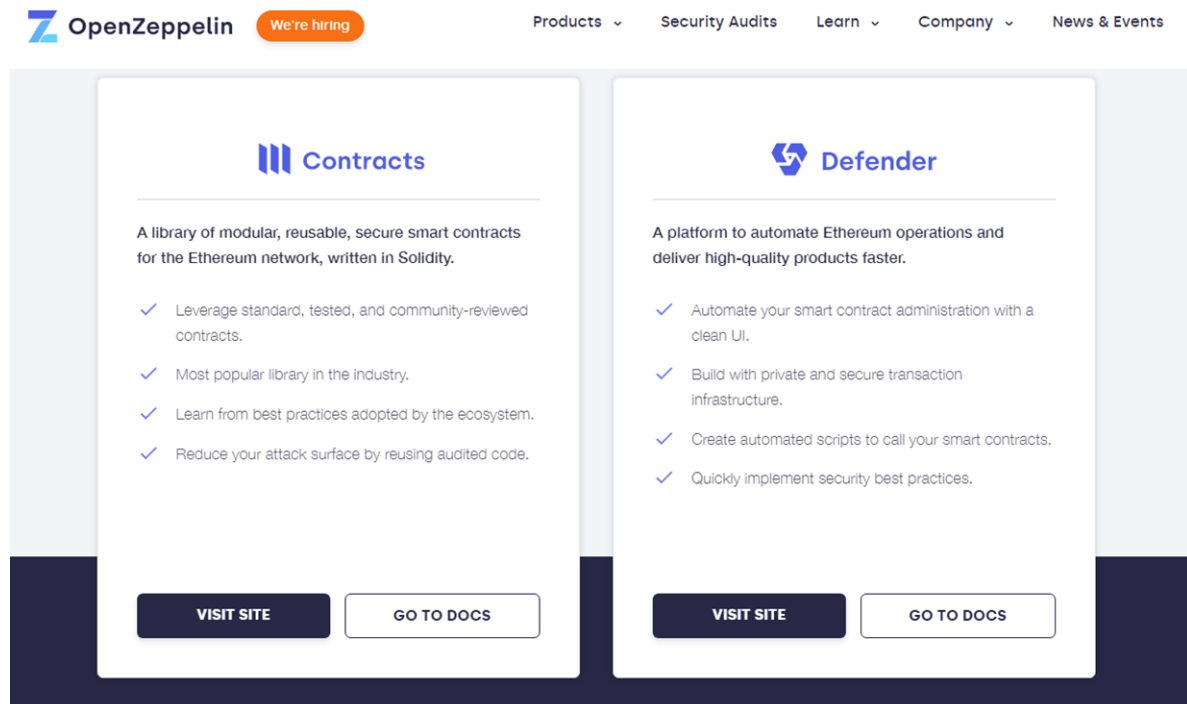mint on Polygon. Once you're done, just click **Create**!

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Supply
The number of items that can be minted. No gas cost to you! ⓘ

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Blockchain

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> ◆ Ethereum   ⌄

15   **Freeze metadata** ⓘ

Freezing your metadata will allow you to permanently lock and store all of this item's content in
decentralized file storage.

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> To freeze your metadata, you must create your item first.

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19   **Create**

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21   Because assets created through the TARO protocol will be issued on the Bitcoin blockchain,

22   they cannot currently be created through OpenSea. And if OpenSea were ever to add

23   support for creating NFTs that were created on Bitcoin (whether through the TARO protocol

24   or otherwise), it would refer to Bitcoin, not to TARO, just like it refers to the consumer-

25   facing name "Ethereum" rather than the developer-facing name of particular Ethereum

26   protocols used to create NFTs (like ERC-721 or ERC-1155).

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84.   Consumers are not likely to be confused between TARO and TARI when looking for digital wallet apps. Even if consumers were to use a wallet app that allowed them to store tokens across multiple blockchains, assets minted on TARO would be referred to as sending assets on Bitcoin or the Lightning Network. Again, while Tari Labs claims to be developing a blockchain, a Tari-branded token, and a Tari-branded wallet application, Lightning Labs will develop *none* of these with the TARO protocol or under the TARO brand. Assets created with TARO will exist on the Bitcoin blockchain, will be identified by their own brand names, and will be stored in Bitcoin or Lightning wallets.

85.   Consumers are not likely to be confused between TARO and TARI when seeking to create smart contracts. Bitcoin is not a smart contract platform because it does not allow for computation in the way that many other blockchains do, such as the Ethereum blockchain. With the TARO protocol, we are bound by the Bitcoin blockchain's limited functionality (which is intentional on the part of Bitcoin developers, as it is more secure), and Lightning Labs is not building a smart contract platform.

86.   I was very surprised to see Tari Labs reference to OpenZeppelin in arguing (incorrectly) that TARO is a smart contract protocol (it is not). OpenZeppelin is a company that works exclusively on the Ethereum blockchain developing decentralized applications (or "dapps"). As OpenZeppelin's website makes clear, the company only builds on Ethereum, not Bitcoin (where TARO assets would exist) or Monero (which Tari Labs claims to be using). This can be seen from the screenshot below, from www.openzeppelin.com, which states that OpenZeppelin provides "a library of modular, reusable, secure smart contracts *for the Ethereum network*" (emphasis added):

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87.   Lightning Labs accordingly has no intention or expectation that the TARO name will be used on OpenZeppelin, since TARO is not useable on the Ethereum blockchain. Indeed, OpenZeppelin's exclusive focus on Ethereum makes clear just how distinct and separate these blockchain communities are, and how consumers are unlikely to encounter products from one blockchain at the same time as another.

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88.   Developers are not likely to be confused between TARI and TARO when selecting development applications or tools. As explained above, software developers tend to exercise a high degree of care, such that it would be highly unlikely that they would, for example, download incorrect repositories of code from Github. That would be like a sweater manufacturer trying to knit a sweater using a machine that weaves denim, or an email software programmer trying to use FTP (File Transfer Protocol) when they meant to use SMTP (Simple Mail Transfer Protocol): the entire job of these sophisticated professionals is to know the purpose of the tools they are using and what those tools can create. Furthermore, the protocols are not interchangeable in functionality and are being built on

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2   fundamentally different blockchains, making it highly unlikely that any developer would

3   select one when seeking the other.

4   89.   Again, Tari Labs' example of potential confusion makes no sense. Tari Labs

5   points to Alchemy, which offers developers tools to build on "web3" – a common term used

6   to describe the decentralized blockchain space. But Alchemy references the *blockchains* on

7   which it is helping developers build – and notably does not include either Bitcoin (used by

8   the TARO protocol) or Monero (which Tari Labs says is where Tari-branded products will

9   live). And even if Alchemy were to expand to encompass the functionality behind TARO,

10   the "chain" Alchemy would reference would be Bitcoin.

11   90.   As for marketing channels, although Lightning Labs has promoted TARO in

12   industry publications and on platforms including Twitter, Substack, and Github, *all*

13   companies in the software development and cryptocurrency spaces use these common online

14   platforms. Lightning Labs does not use Messari, no longer uses Freenode, and has no

15   "official" subreddit.

16   ***Confusion Among Developers (or even Consumers) in the Blockchain Space Is***

17   ***Particularly Unlikely***

18   91.   Further undermining any risk of confusion, both developers and consumers in

19   the cryptocurrency space encounter a variety of very similar (or even identical) names for

20   different companies and their services. For example:

21   • there are brands operating in the crypto industry with names highly similar to TARI,

22   including TARA (https://mobile.twitter.com/taraxa_project, a coin of the TARAXA

23   project), TAKI (https://coinmarketcap.com/currencies/taki/), and ATARI

24   (https://www.atarichain.com/).

25   • There are two companies in the crypto industry using the name "Genesis" (one by

26   "Genesis" and the other by "Genesis Digital Assets") and two called "Paradigm."

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- Ava Labs and Aave are both developer- and consumer-facing companies in the crypto industry that created the AVA blockchain and the AAVE protocol, respectively, and have released tokens called "AVAX" and "AAVE," respectively. Each of those tokens is available for consumers to purchase.

- There are a variety of companies in the crypto industry whose names start with the word "**coin**" – including exchanges like Coinbase, reporting sites like Coindesk, and investment firms like CoinShares, in addition to CoinFLEX, Coinhouse, Coinjar, Coinlist, Coinme, Coinmetrics, Coins.ph, Coinmarketcap, CoinCorner, CoinFloor, Coin Telegraph, and Coinone.

- There are a variety of companies in the crypto industry whose names start with the word "**bit**" – including custody infrastructure firm BitGo, exchange Bitso, and payment processor BitPay, in addition to Bitmark, Bitmart, Bitmex, Bittrex, BitFlyer, Bitfinex, Bitnomial, BitOasis, Bittensor, Bitstamp, Bitnob, Bitpanda, Bitget, and Bithumb.

- There are a variety of companies in the crypto industry whose names start with the word "**block**" – including Block, The Block, Bloq, blokur, Blockchain, Blockchain Capital, Blockstream, BlockSec, BlockFi, and Blockdaemon.

- There are a variety of companies in the crypto industry whose names start with the prefix "de-," including Decent, Decent DAO, Decentral Games, Decentraland, DeSo.

- There are also dozens of crypto companies and brands with short three-, four-, and five-letter names, including, among many others: AAVE, AVA, BTCC, BTSE, CELO, CEX.IO, DAI, DASH, DYDX, FEDI, EOS, FLOW, LIDO, LUNO, MINA, NEO, NEAR, OKX, TEZOS, TRON, and ZCASH. Most of these are not Bitcoin-related projects, and many may not be considered reputable by the Bitcoin developer community – but they are all in the crypto marketplace.

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2   As a result of the co-existence of such similar brands in the crypto space, developers and

3   consumers alike are accustomed to paying careful attention to the name of a blockchain

4   project and are not easily confused, even by superficially similar names.

5   92.   I am aware of no instances of confusion between the TARO and TARI names.

6   Nor can I conceive of any realistic circumstance where any actual user of the TARO protocol

7   could reasonably be confused between TARO (and/or any assets ultimately created using the

8   protocol) and TARI (and/or any other goods or services offered by Tari Labs).

9   ***The Absence of Any Fully-Launched TARI-Branded Products Further Undermines***

10   ***Any Risk of Confusion***

11   93.   Further undermining any risk of confusion between Lightning Labs' use of

12 the TARO name and Tari Labs' use of the TARI name, Tari Labs appears not to be using

13 TARI for any fully-launched products or services that consumers could possibly associate

14 with Lightning Labs or that could prompt consumers to associate TARO with Tari Labs.

15   94.   I understand from Tari Labs' website that it has not yet released a mainnet

16 version of the TARI protocol. After this litigation was filed, I reviewed the Tari subreddit

17 (www.reddit.com/r/tari) and identified the comment below from a user named "delta1-tari,"

18 who previously posted a number of "dev updates" in the Tari subreddit and appears to me to

19 be associated with Tari Labs. In this comment – from at least two years ago, according to

20 Reddit – "delta1-tari" responds to the question "When will main net launch?" by saying

21 "Soon™ - no roadmap." ("Soon™" is a common "meme" phrase stemming from gaming

22 and early internet culture that is used jokingly to signify that something will likely not

23 actually happen soon. *See* https://wowwiki-archive.fandom.com/wiki/Soon/.)

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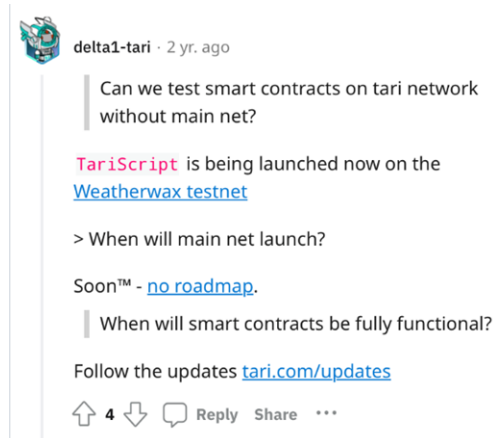
10   95.   Another post about a year later from delta1-tari makes clear that "Soon™"

11 indeed did not actually mean soon. In response to another question about "when [the] Tari

12 network will go live," delta1-tari responded "No ETA" – and again said "soon™".

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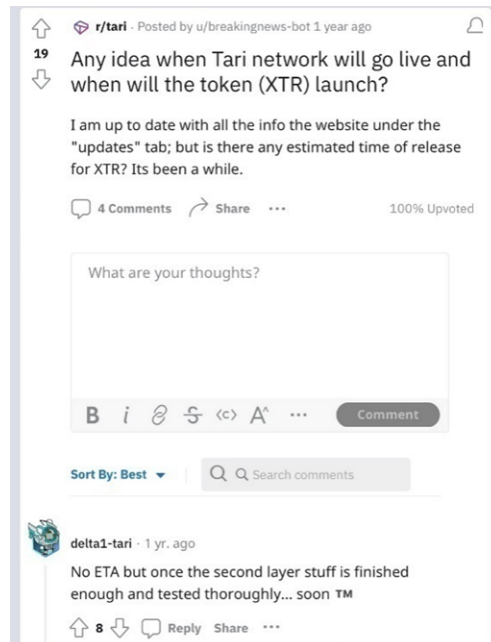
24   96.   Questions about "when" were apparently so widespread that the Tari Labs

25 development team was apparently forced to write a blog post to respond. After this litigation

26 was filed, I found a September 28, 2021 blog post titled *Wen Mainnet?* published on

27 www.tari.com that explained that "Tari is in no rush to launch mainnet" because "we don't

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have our star player ready to take the field," referring to "the DAN" ("Digital Assets Network"). Cayle Sharrock, *Wen Mainnet?*, Tari.com (Sept. 28, 2021) ("Wen" is a common intentional misspelling of "when" used in social media like Reddit, Discord, or Telegram.) A true and correct copy of Tari Labs' blog post is attached as Exhibit 18, and an excerpt is shown below.

Wen Mainnet?

"Wen mainnet, sir?"

The genuinely most frequently asked question in the Tari telegram group is "wen mainnet" or variations on that theme:

"I've been waiting since 2018!" (ed: That's not even a question.)

"Why are you guys so slow?"

"Who does testnet for over a year?" (spoiler: we do).

Allow me to share my thoughts on why Tari is in no rush to launch mainnet. And why this approach is the right thing for the community.

The *raison d'etre* for Tari, excuse my French, is the Digital Assets Network (DAN). That's not ready yet. There are many tough problems to solve in this realm before we can issue scalable, easy-to-use, performant assets on Tari. Solving these problems has us breaking new ground in one way or another, so progress is slow. Really slow. And we must get it right.

97.   Exactly one year later, Tari Labs noted in a planning meeting that its Digital Assets Network – their "star player" mentioned above – wouldn't be ready for another two years. This is shown in the excerpted image below from a transcript of a September 28, 2022 "Mainnet Planning Meeting" published by Tari Labs. A true and correct copy of the transcript from Tari Labs' website is attached are Exhibit 19.

CjS 👁️🙏👁️ - *Today at 11:19 AM*

The #1 comment in the community is "wen mainnet?". Are we being silly in holding out, maybe for another 2 years, while the DAN gets fully built out?

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2   98.   Tari Labs' own website shows zero transactions and zero "blocks" in the Tari

3 blockchain, as shown in the image below, indicating that no consumers have used the TARI

4 protocol to mint or transfer any assets.

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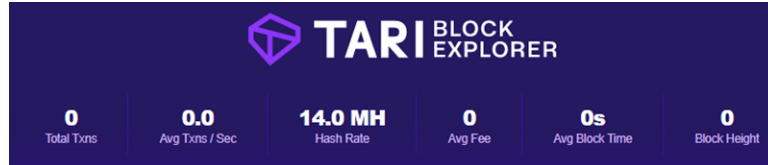
8 A true and correct copy of the Block Explorer page on Tari Labs' website is attached as

9 Exhibit 20. That understanding is confirmed by the Declaration of Mr. Jain, who admits that

10 "[t]he Tari protocol is currently in the 'testnet' phase, meaning that the protocol is available

11 to users for testing ahead of its full-scale launch." Jain Decl. ¶ 2.

12   99.   I understand from Tari Labs' court filings that it claims to have released

13 TARI-branded tokens. However, Tari Labs' website displays a chart (shown below) that

14 purports to show a bar graph of the TARI tokens in existence – yet every number along the

15 Y axis is zero, indicating that Tari Labs has, in reality, issued no TARI-branded tokens.

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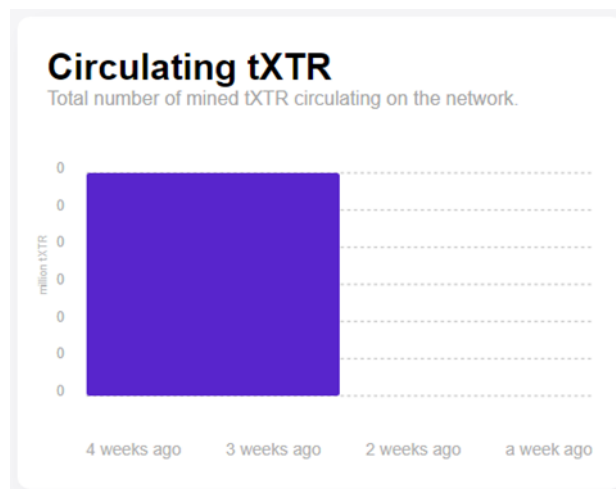
24 Tari Labs appears simply to have released is a testnet for what a page of Tari Labs' own

25 website – a true and correct copy of which is attached as Exhibit 21 – calls "*fake Tari*"

26 tokens (emphasis added), which have "no monetary value and cannot be exchanged for cash,

27 cash equivalent, or other tokens or cryptocurrencies."

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2   100.   I understand from Tari Labs' court filings that it claims to have launched the

3   TARI Aurora Mobile Wallet, available in the iPhone and Android app stores. Based on my

4   review of Tari Labs' website and the app store pages for the app, however, Tari Labs' wallet

5   app appears to be (at most) in beta. That understanding is confirmed by the fact that Tari

6   Labs' website states that the app is currently in version 0.19.0. Attached as Exhibit 22 is a

7   true and correct copy of the Tari Aurora Updates page. Another page on Tari Labs' website

8   confirms that the app is not "production-ready," stating (in the future tense): "In its

9   production-ready state, it will be a beautiful, easy to use Tari wallet focused on Tari as a

10   default-private digital currency." Tari's website also describes the app as "a reference-

11   design mobile wallet app for the forthcoming Tari digital currency," suggesting that although

12   the app is available for download in the app store, it will not be in a production version until

13   the Tari currency is released. True and correct copies of these webpages are attached as

14   Exhibit 23.

15   **A TRO Would Irreparably Harm Lightning Labs and the Bitcoin Developer**

16   **Community, and Tari Labs Would Not Be Harmed by a Denial**

17   101.   Software development is a continual, iterative process. We are constantly

18   editing, tweaking, and drafting code. When a project is open-source, like TARO has been

19   since last September, that process happens out in the open, in a public Github repository.

20   Prior to the Order on February 22, 2023, Lightning Labs has not maintained any private

21   software repository or private version of the TARO codebase since the code was released

22   publicly on September 28, 2022. In order to ensure that there was no question that we were

23   fully complying with the Order, in the middle of the night on February 22–23, Lightning

24   Labs created a new private TARO Github repository in order to continue its work on the

25   TARO project, and it had to notify its developers across the world about the change. There

26   are now two repositories of the TARO code – one that has been public since September 28,

27   2022 and a new private repository that will eventually need to be merged with the public

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2 repository. There are now two versions of everything – including bug reports, feedback on

3 Github issues, and technical product management – which will be difficult and time

4 consuming to merge, once the Order is lifted.

5   102.   Lightning Labs is not the only developer working on TARO, as I mentioned

6 above. There is an active community outside of Lightning Labs that is also working on the

7 code, and given the Order, out of an abundance of caution, we have stopped all work with

8 those external developers to ensure no new software is released. This effectively *destroyed*

9 the status quo, in which Lightning Labs and external parties were jointly working on the

10 TARO project, by forcing us to move our work on the TARO codebase onto a copy, rather

11 than the live, public Github page.

12   103.   Out of an abundance of caution, to ensure we comply with the Order,

13 Lightning Labs is also holding back any public discussion of TARO, including through posts

14 on social media mentioning TARO, which hinders the company's ability to communicate

15 with the Bitcoin developer community about its projects.

16   104.   I strongly believe that the Order prohibiting Lightning Labs from

17 "publish[ing] or provid[ing] its software update" without specificity irreparably harms our

18 business and the TARO brand, as would any further injunction that prevents Lightning Labs

19 from working on the open-source TARO protocol.

20   105.   In the 319 days since we started coding for the TARO project, we have issued

21 831 "commits" (or code updates) on Github. In other words, *we have averaged more than*

22 *two updates per day since April 2022*. To comply with the Order, we have ceased all routine

23 public updates to TARO, significantly hindering day-to-day development of the protocol.

24   106.   Although the Order permits us to "continue any internal work on its product,"

25 open-source software development is an inherently iterative and collaborative process that

26 requires continual updates that can then be built on by others in the community (both inside

27 and outside of Lightning Labs).

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107.   Lightning Labs is the steward of the open-source code for TARO, and Lightning Labs regularly has developers contact it to inquire when certain features are going to be implemented into TARO, submit bug reports, submit code for review, provide feedback on the code, and generally participate in the development process. Because of the steps we have taken to comply with the Order, we cannot actively respond to outstanding Github issues or interact with external contributors. We are currently unable to review code from anyone outside Lightning Labs, and external contributors are unable to review code written by Lightning Labs employees, both of which are normal parts of open-source software development. We cannot publicly respond to Github issues which may involve bug reports or feedback on the code. As a result, Lightning Labs' reputation among these developers is now being actively damaged.

108.   It is not feasible to simply rename the protocol, which is already widely known in the developer community as "TARO," and many external developers have already begun building on TARO under that name. Use of another name would result in significant confusion, frustration, and unnecessary redundancy in code development, both of which will irreparably damage Lightning Labs' reputation among developers. I also understand that the community likes TARO's reference to the Taproot upgrade to Bitcoin – thus, if Lightning Labs were required to use a new name for the protocol, even for a short period of time, there would likely be at least two different names being used for the protocol within the developer community, which would be highly confusing.

109.   The Order thus harms not only Lightning Labs but also third parties who are collaborating on the development of TARO and independently building on TARO. For example, it harms the third-party developers who participate in the Developer Community Calls (which are currently halted, pending resolution of the TRO, out of an abundance of caution), submit bug reports to Github, contribute code to Github, and have their code

reviewed on Github. Additionally, many developers are waiting for progress on the TARO protocol so they can test it – but the Order will inevitably delay the protocol's progress.

110.   On the other hand, there is nothing to indicate that Tari Labs would suddenly face harm if the Court refuses to grant an injunction that Tari Labs took ten months to request. Our continued steady development of TARO will not harm Tari Labs, just as it did not harm Tari Labs in April, May, June, July, August, September, October, November, December, or January, during which time we were publicly discussing the project and ultimately (in September 2022) publicly releasing the entire code base and product development timeline for the world to see. Over ten months have elapsed since Tari Labs became aware of TARO in April 2022; over five months have elapsed since Tari Labs sent Lightning Labs a demand letter in September 2022 requesting that we change the TARO name, which we declined; and over two months have elapsed since Tari Labs filed this lawsuit – yet it did not seek emergency relief until last week. Despite our announcement of TARO over ten months ago and our release of the initial code for TARO approximately five months ago, Tari Labs has provided not even one example of confusion – and, again, I am not aware of any confusion. Our continued development of the protocol will not change that.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this 27th day of February 2023, in New York, NY.

Elizabeth Stark
_____

Elizabeth Stark

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